

CHAPTER 15: WIRELESS TELECOMMUNICATION FACILITIES

15.1 PURPOSE

The purpose of this chapter is to establish general requirements for the siting of wireless telecommunication facilities which deal with issues of visual mitigation, noise, residential impacts, health, safety and facility siting. The provisions of this chapter apply to both commercial and private wireless telecommunication facilities except for residential communication equipment for single family units that are not used for commercial profit. The intent of this chapter is to:

- a. Encourage the location of wireless telecommunication facilities in nonresidential areas;
- b. Minimize the total number of monopole wireless telecommunication facilities throughout the community;
- c. Encourage the co-location use of new and existing wireless telecommunication facility sites;
- d. Encourage providers and users of wireless telecommunication facilities to locate such facilities where the adverse impact on the community is minimal;
- e. Encourage providers and users of wireless telecommunication facilities to use innovative designs to minimize adverse visual impact; and
- f. Enhance the ability of the providers of telecommunication services to provide such services to the community quickly, effectively, and efficiently.

15.2 DEFINITIONS

As used in this chapter:

ANTENNA. A transmitting or receiving device used in telecommunications that radiates or captures radio signals.

CO-LOCATION. The siting of two or more communication antennas on a single communication tower or siting of one or more antennas on an existing building or structure.

LATTICE TOWER. A self-supporting multiple sided, open steel frame structure used to support telecommunications equipment.

MONOPOLE FACILITY. An antenna or series of individual antennas mounted on a single cylindrical pole, together with its associated equipment. For the purposes of this chapter, if a facility does not fit the definition of a roof or wall mounted facility it shall be considered a monopole facility.

ROOF MOUNTED FACILITY. An antenna or series of individual antennas mounted on a flat or pitched roof, mechanical room or penthouse of a building or structure, together with its associated equipment.

STEALTH FACILITY. A wall, roof, or monopole facility which is disguised as another object or otherwise concealed from view. Examples of stealth facilities include, but are not limited to, trees, synthetic rocks, or architectural elements such as dormers, steeples, and chimneys.

WALL MOUNTED FACILITY. An antenna or series of individual antennas mounted against the vertical wall of a building or structure, together with its associated equipment.

WIRELESS TELECOMMUNICATION FACILITY OR FACILITIES. An unmanned structure or structures which consist of equipment used primarily for the transmission, reception or transfer of voice or data through radio wave or wireless transmissions. Such sites typically require the construction of transmission support structures to which antenna equipment is attached.

15.3 APPLICABILITY

The requirements of this chapter apply to both commercial and private wireless telecommunication services such as "cellular" or "PCS" (personal communications services) communications, wireless internet, and paging systems. All wireless telecommunication facilities shall comply with the following regulations and all other ordinances of the town, as well as with any pertinent regulations of the Federal Communications Commission and the Federal Aviation Administration.

15.4 MASTER PLAN REQUIRED

A site location master plan shall be submitted by each company desiring placement of wireless telecommunication facilities. The master plan shall be submitted to the planning commission and town staff prior to processing any permits for permitted or conditional use locations. The master plan shall include an inventory of existing and anticipated sites for the location of wireless telecommunication facilities within the town, within the town annexation boundary, and within one-half mile outside of the town annexation boundary. The plan shall indicate area coverage, if known, location, antenna height above existing grade, ability to co-locate or justification for not co-locating, and antenna type for each site. The plan shall be updated by the company upon request from the planning commission. Every master plan shall be considered proprietary information and not be part of the public record.

15.5 ALLOWABLE USES

The uses specified in Table "A" are allowed provided that they comply with all requirements of this chapter.

TABLE A				
P - Permitted Use		C - Conditional Use		N- Not allowed
Zones	Wall Mount	Roof Mount	Monopole	Lattice Tower
R-1	N	N	N	N
R-2 ^S	N	C	C	N
R-3 ^S	C	C	C	N
GC ^S	C	C	C	N
VC ^S	C	C	C	N

L-1 ^S	C	C	C	N
ROS (Recreation Open Space)	C	C	C	N
COS (Conservation Open Space)	C	C	C	N
CV (Civic Uses) ^S	C	C	C	N

^S - Stealth facilities are conditional uses and not required to be located with public or quasi-public uses.

15.6 FACILITY TYPES AND STANDARDS

Wireless telecommunication facilities are characterized by the type and location of the antenna structure. There are four general types of antenna structures: wall mounted; roof mounted; monopoles; and lattice towers. Standards for the installation of each type of antenna are as follows:

- a. **Wall Mounted Antenna.** The following provisions apply to wall mounted antennas: (see Figure 1)
 - i. Wall mounted antennas shall not extend above the wall line of the building or structure or extend more than four feet horizontally from the face of the building or structure.
 - ii. Antennas, equipment and the supporting structure shall be painted to match the color of the building or structure or the background against which they are most commonly seen. Antennas and the supporting structures on buildings shall be architecturally compatible with the building.
 - iii. Antennas mounted directly on existing parapet walls, penthouses, or mechanical equipment rooms, with no portion of the antenna extending above the roofline of such structures, shall be considered a wall mounted antenna.
 - iv. Stealth wall mounted antennas are encouraged and shall be allowed to vary from the provisions of this section as determined by the Town Manager or his designee for permitted uses and the Planning Commission for conditional uses. Stealth wall mounted antennas are not required to be located with public or quasi-public uses in R-1, R-2, and R-3 zones (see Table A).
- b. **Roof Mounted Antenna.** The following provisions apply to roof mounted antennas: (see Figures 2 and 3)
 - i. Roof mounted antennas shall be allowed on top of existing penthouses or mechanical equipment rooms provided the antennas and antenna mounting structures shall not extend more than eight feet above the existing roofline of the penthouse or mechanical equipment room.
 - ii. For antennas not mounted on a penthouse or mechanical equipment room and on a flat roof:
 1. **Setback.** The antennas shall be mounted at least five feet from the exterior wall or parapet wall of a building or structure.
 2. **Height.** The height shall be measured from the top of the antenna to the roofline of the building or structure, or to the top of the parapet wall if a parapet wall exists. For antennas mounted between five and fourteen feet from the exterior wall or parapet wall, the maximum

height of the antenna is equal to the distance the antenna is set back from the exterior wall or parapet wall. For antennas setback more than fourteen feet the maximum height shall be fourteen feet (14').

3. Roof mounted antennas on a pitched roof shall be allowed provided the antennas and antenna support structures do not extend higher than the peak of the roof measured by a horizontal line from the peak extending over the roof (see Figure 3).

4. Roof mounted antennas shall be constructed and/or colored to match the surroundings in which they are located.

5. Stealth roof mounted antennas are encouraged and shall be allowed to vary from the provisions of this section as determined by the Planning Commission. Stealth roof mounted antennas are not required to be located with public or quasi-public uses in R-1, R-2, and R-3 zones (see Table A).

c. Monopole. The following provisions apply to monopoles:

i. The height limit for monopoles is sixty feet. The height shall be measured from the top of the structure including antennas, to the original grade directly adjacent to the monopole. The Planning Commission may allow a monopole up to eighty feet in the GC, VC, L, ROS, COS, and CV zones if it finds that:

1. The monopole will blend in with surrounding structures, poles, or trees and is compatible with surrounding uses;

2. The monopole will be available for co-location with other companies; and

ii. In R-2 and R-3 zones, monopoles will only be allowed in conjunction with an existing public or quasi-public use. Public and quasi-public uses include, but are not limited to, churches, schools, utility infrastructure areas (substation, service yards), and parks.

iii. No monopoles shall be allowed in the front yard setback of any lot.

iv. Monopoles shall be setback from any residential structure a distance equal to its height.

v. Stealth monopole facilities are encouraged and shall be allowed to vary from the provisions of this section as determined by the Town Manager or designee for permitted uses and the Planning Commission for conditional uses. Stealth monopoles are not required to be located with public or quasi-public uses in R-2, and R-3 zones (see Table A).

d. Lattice Towers. Lattice towers are not allowed.

15.7 COLOR

Monopoles, antennas, and any associated buildings or equipment shall be covered with natural material (exposed aggregate, wood, stone veneer) or painted to blend with the surroundings with which they are most commonly seen. The color and appearance shall be determined on a case-by-case basis by the Planning Commission for conditional uses and by the Town Manager or his designee for permitted uses. Within six months after the facility has been constructed, the Planning Commission or the Town Manager may require the color be changed if it is determined that the original color does not blend with the

surroundings.

15.8 SITE REQUIREMENTS

- a. Any grading for telecommunication facilities, including access roads and trenching for utilities, shall comply with the Land Management Code and currently adopted State building codes. All reasonably available measures shall be taken to minimize disturbance of the natural environment.
- b. A computer-generated visual simulation of the proposed structures is required for all sites. The simulation shall show all structures including but not limited to monopoles, antennas, equipment buildings and any related facilities or structures.
- c. All reasonably available measures shall be taken to minimize disturbance of the visual environment. Site placement and color shall be carefully considered so that the facilities will blend in with the surroundings.
- d. Continuous outside lighting is prohibited unless required by the FAA for the monopole or antenna.

15.9 ADDITIONAL REQUIREMENTS

The following shall be considered by the Planning Commission for conditional uses:

- a. Compatibility of the proposed structure with the height and mass of existing buildings and utility structures.
- b. Location of the antenna on other existing structures in the same vicinity such as other monopoles, buildings, water towers, utility poles, athletic field lights, parking lot lights, etc. where possible without significantly impacting antenna transmission or reception.
- c. Location of the antenna in relation to existing vegetation, topography, including ridge lines, and buildings to obtain the best visual screening.
- d. Spacing between monopoles which creates detrimental impacts to adjoining properties.
- e. Installation of, but not limited to, driveways, landscaping, and fencing as required by the Land Management Code.

15.10 ACCESSORY BUILDINGS

Accessory buildings constructed or used in connection with antennas, monopoles or other facilities must comply with the required setback, height and landscaping requirements of the zoning district in which they are located. All utility lines on the lot leading to the accessory building, antenna, monopole or other facility or structure shall be installed underground.

15.11 NON-MAINTAINED OR ABANDONED FACILITIES

The building official may require each non-maintained or abandoned telecommunication facility to be removed from the building or premise when such a facility has not been repaired or put into use by the

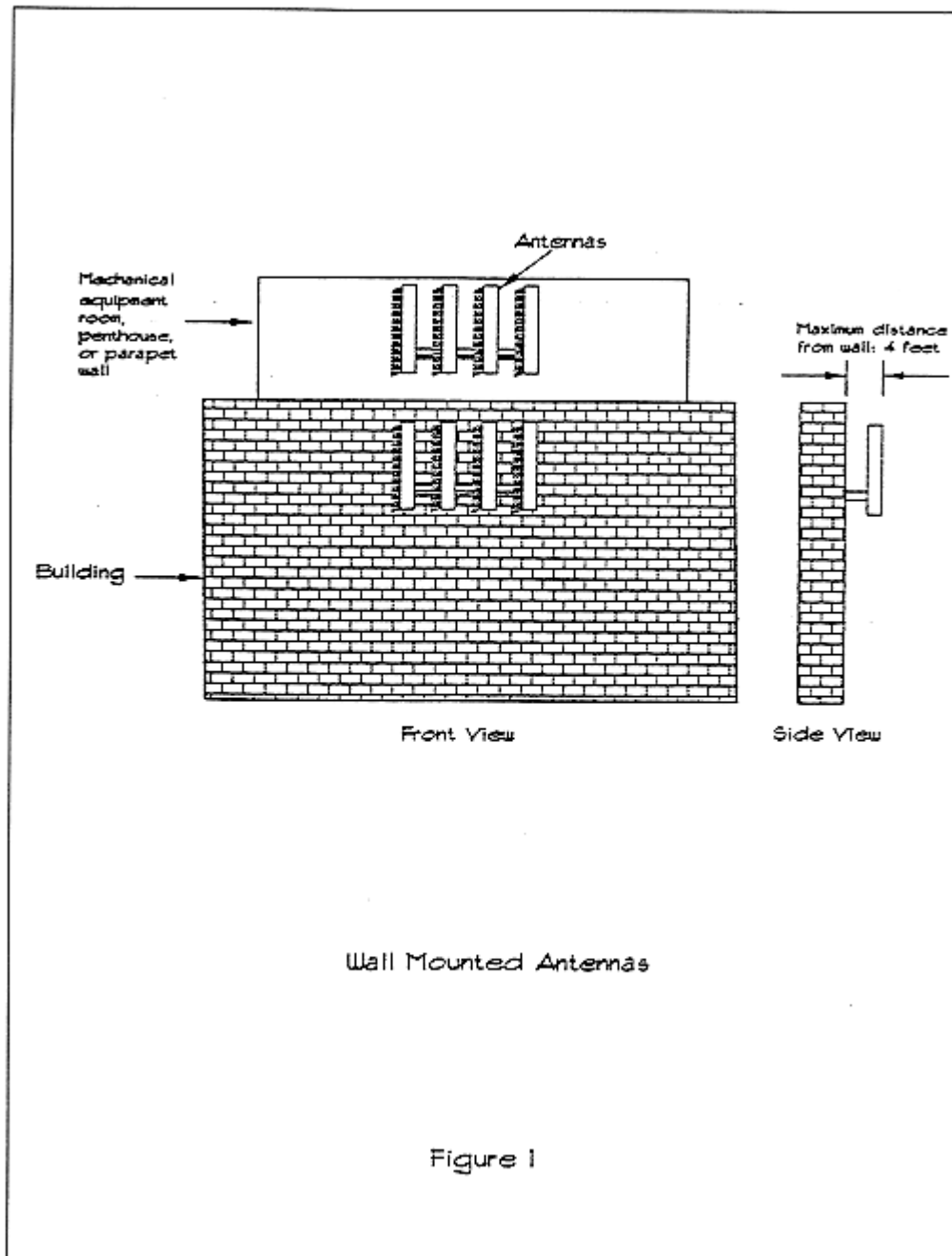
owner or agent within ninety calendar days after notice of non-maintenance or abandonment is given to the owner or agent.

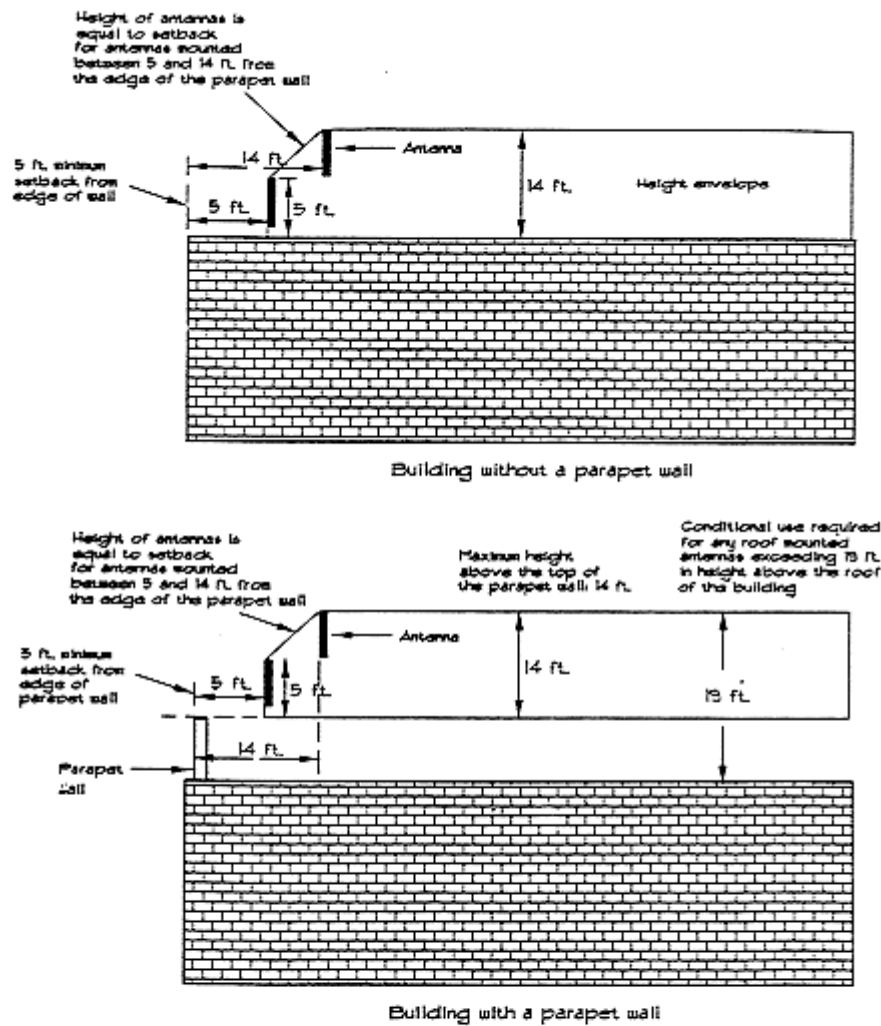
15.12 BUILDING PERMIT REQUIRED

A building permit is required for all wireless telecommunication facilities including, but not limited to, monopoles, and roof and wall mounted antennas.

15.13 ILLUSTRATIONS

The following illustrations, Figures 1, 2, and 3, are intended to demonstrate graphically the intent of this chapter. Such illustrations shall in no way be interpreted to modify, amend or vary the terms of this chapter.





Roof Mounted Antennas

Figure 2

